A cross sectional study to assess the prevalence of depression, anxiety and psychosis in women undergoing cervical cancer treatment in a tertiary care center

## Introduction

In India, cervical carcinoma falls in the top ten leading causes of cancer-related deaths in women. The latest technological growth has ensured that there is an early detection, treatment, and management of cervical cancer which has led to longer survival rates. With recent advancement in cancer treatment, there is improved prognosis leading to longer survival rates. A five-year survival rate is 0, 1A and 1B are 80%. The longer survival has increased the psychiatric morbidity and mortality in these patients. The resultant increase in life expectancy for people with cervical cancer has led to other mental health conditions like anxiety and depression. Anxiety and depression sadly go unnoticed and untreated which at times leads to decreased quality of life and even sometimes suicide. A literature search showed that there is a gap in the literature about the prevalence of depression, anxiety, and psychosis in cancer cervix patients in an Indian setting. This study aims to understand the prevalence of depression, anxiety, and psychosis among women affected by cervical carcinoma and various factors associated with it.

## Methods

A cross sectional, descriptive study was done by drawing samples from the outpatients of Radiology department at Government Stanley Hospital, Chennai with consecutive sampling from Outpatient department satisfying the selection criteria from July 2016 to July 2017. The sample was drawn from the radio therapy OPD patients who were diagnosed with cervical cancer from stage 1 to 4.Sample size was 67. Data was collected using the following tools;

A structured Performa to collect the socio demographic details, family history details, and clinical profile; Hamilton Anxiety Rating Scale (HAM-A); Hamilton Depression Rating

Scale (HAM-D); Female Sexual Function Index (FSFI); The Columbia Suicide Severity Rating Scale (C-SSRS); EORTC (European Organisation for Research and Treatment of Cancer ) quality of life questionnaire (QLQ). Statistical analysis was done using computerized software (SPSS 20). Descriptive statistics like frequencies, percentages, means and standard deviations were computed. Correlation tests and chi-square tests were done for different variables and parameters.

## Results

The majority of them were in stage three (97%, n=65) and taking radiotherapy alone (76.1%, n=51). A larger part of the participants was in the age group of 51 to 65 years (52.2%, n=35). Most of the participants (79.1%, n=53) lived in nuclear families. Summarising the study, there is a correlation between the psychiatric morbidity, sexual function and quality of life and suicidal ideation with staging, treatment and duration of the disease. Correlation tests between suicide ideation and other variables showed positive and significant correlation with duration of diagnosis, staging of cancer and radiotherapy and surgery. Correlation tests between brief psychiatry rating scales and other variables showed positive and significant correlation with duration of diagnosis, staging of cancer and radiotherapy and surgery corroborating with previous studies. There is a negative correlation between the stage of the disease and the psychological well being. Sexual dysfunction was more common after radiotherapy. Cancers that had an advanced staging at the time of diagnosis were associated with a higher risk of suicide in the first twelve months of diagnosis. New diagnosis of cervical cancer is related to moderate/severe anxiety or depression. The rate of depression is higher among women with cervical carcinoma. Majority of the women diagnosed with cancer experience mental distress. Quality of life is poor in advanced stage and in patients treated with radiotherapy.

## Discussion

The treatment should focus on improving the overall quality of life taking into consideration the following parameters; Pre treatment assessment for psychiatric morbidity; Pre treatment counselling; Assessment during treatment for suicide, anxiety and depression; Assessment during treatment for sexual dysfunction; Appropriate treatment and psycho education for any psychiatric morbidity if detected.

Key words: Cervical Carcinoma, Psychiatric conditions, India, Depression, Suicide